

On page 7, lines 6-11, delete:

"In the prior patent applications mentioned above, it is assumed that a permit key obtaining rout is different from a data obtaining route as shown in Fig. 3A, and that the permit key is obtained from a key control center via public telephone lines. However, if a charging method is determined, it is possible to obtain the permit key via the communication system through which the database is supplied."

and insert in place thereof:

~As shown in Figure 3A, the permit key and database data may be obtained via different communication routes, with the permit key being obtained from a key control center via public telephone lines. However, if a charging method is arranged, it is also possible to obtain the permit key via the same communication system through which the database data is supplied.~

On page 7, lines 13-20, delete:

"In the system of the prior patent applications, it is assumed that the permit key for secondary exploitation is used for distribution of the data selected for secondary exploitation. Secondary exploitation involving the storing, copying, editing, transferring, etc. of data is not included in the assumption. Also, it is assumed that the data is distributed only inside a LAN to which the users belong. Distribution outside the LAN is not part of the assumption. Therefore, the system is not adequate to cope with secondary exploitation unless the users choose to honor the copyright."

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and insert in place thereof:

Previous systems have not considered secondary exploitation of copyrighted data, such as forms of use involving storing, copying, editing, transferring, etc. of data. Also, these previous systems do not consider distribution of data outside a LAN to which the users belong. Therefore, these previous systems are not adequate to cope with secondary exploitation of data unless the users of the data choose to honor the copyright of the data.

On page 7, line 23, after "above," and before "a plurality of permit keys", insert --in the present invention,--.

On page 7, line 26, after the word "etc.", delete:
"Examples of these utilization forms are shown in Figs. 4A to 4E.

Fig. 4A illustrates a case when supplied encrypted data is displayed. The encrypted data is decrypted by a display permit key, and the data thus decrypted is displayed. Fig. 4B illustrates a case when supplied encrypted data is edited. The encrypted data is decrypted by an edit permit key, and the data thus decrypted is displayed, and then editing is performed. Fig. 4C illustrates a case when supplied encrypted data is stored. The encrypted data is decrypted by a storage permit key, and the data thus decrypted is displayed, and then storing is performed. Fig. 4D illustrates a case when supplied encrypted data is copied. The encrypted data is decrypted by a copy permit key, and the data thus decrypted is displayed, and then copying is performed. Fig. 4E illustrates a case when supplied encrypted data is transferred. The encrypted data is

decrypted by a transfer permit key, and the data thus decrypted is displayed, and then transfer is performed. In these Figures, double-framed parts show that data is encrypted."

and ~~insert~~ in place thereof:

Examples of implementing these forms of use in accordance with an embodiment of the invention are shown in Figs. 4A-4E. In these Figures, double-framed parts show that data is encrypted.

Fig. 4A illustrates the case in which the encrypted data supplied to a user is displayed. The encrypted data is first decrypted by a display permit key, and the data thus decrypted is displayed.

Fig. 4B illustrates the case in which the encrypted data supplied to the user is edited. The encrypted data is first decrypted by an edit permit key, and the data thus decrypted is displayed. Subsequently, editing is performed on the decrypted data.

Fig. 4C illustrates the case in which the encrypted data supplied to the user is stored. The encrypted data is first decrypted by a storage permit key, and the data thus decrypted is displayed. Subsequently, the decrypted data is stored.

Fig. 4D illustrates the case in which the encrypted data supplied to the user is copied. The encrypted data is first decrypted by a copy permit key, and the data thus decrypted is displayed. Subsequently, the decrypted data is copied.

Fig. 4E illustrates the case in which the encrypted data supplied to the user is transferred. The encrypted data is first decrypted by a transfer permit

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(continued)
key, and the data thus decrypted is displayed. Subsequently, the decrypted data is transferred.~

On page 8, delete the text beginning on line 12 with "In the prior patent" and ending on line 17 with "the lowest level key."

On page 8, line 19, delete "By applying this system" and insert --On the relation of keys-- in place thereof.

On page 9, line 1, delete "execute display" and insert in place thereof -- display the data--.

On page 9, lines 7-8, delete "if it is necessary to limit the number of times the data is used."

On page 9, delete the text beginning on line 14 with "The use of data includes" and ending on line 28 with "executed by the copyright control program." and insert in place thereof:

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~In an embodiment of the invention, copyright control is enforced by a copyright control program. The forms of use which are allowed or prohibited by the copyright control program include storing, displaying, copying, editing, transferring, etc. of data. In the case where it is necessary to limit the number of usage times or the forms of use, a message for such purpose may be displayed by the program. Information on the original copyright, and subsequent copyrights for subsequent editions, may be given to the data to

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(cont'd) ensure complete copyright control. Thus, damage to a data supplier or user, due to falsification of copyright information, is prevented.~

On page 10, line 2, ~~insert~~ --the-- before "conscience."

On page 10, lines 6-7, ~~delete~~ "as described in the prior patent application, i.e. Japanese Patent Application 4-276941 (US-08/135634)" and ~~insert~~ in place thereof --in an embodiment of the invention--.

On page 10, line 8, ~~delete~~ "are left" and ~~insert~~ in place thereof --is left--.

On page 10, line 11, after "program." ~~delete~~:
"These examples are shown in Figs. 5A to 5E.

Fig. 5A illustrates a case when supplied encrypted data is displayed. The encrypted data is decrypted by a display permit key, and the data thus decrypted is displayed. Fig. 5B illustrates a case when supplied encrypted data is edited. The encrypted data is decrypted by an edit permit key, and the data thus decrypted is displayed, and then editing is performed. Fig. 5C illustrates a case when supplied encrypted data is stored. The encrypted data is decrypted by a storage permit key, and the data thus decrypted is displayed, and then, the decrypted data is encrypted again by the storing permit key and then storing is performed. Thus, the data encrypted again is stored. Fig. 5D illustrates a case when supplied encrypted data is copied. The encrypted data is decrypted by a copy permit key, and the data thus decrypted is displayed and then, the decrypted data is encrypted again by the copy permit key, and then copying is

performed. Thus, the data encrypted again is copied. Fig. 5E illustrates a case when supplied encrypted data is transferred. The encrypted data is decrypted by a transfer permit key, and the data thus decrypted is displayed and then, the decrypted data is encrypted again by the transfer permit key, and then transfer is performed. Thus, the data encrypted again is transferred. In these Figures, double-framed parts show that data is with encrypted."

and insert in place thereof:

Examples of implementing each form of use in accordance with another embodiment of the invention are shown in Figs. 5A to 5E. In these Figures, double-framed parts show that data is with encrypted.

Fig. 5A illustrates the case in which the encrypted data supplied to the user is displayed. The encrypted data is decrypted by a display permit key, and the data thus decrypted is displayed.

O₅- Fig. 5B illustrates the case in which the encrypted data supplied to the user is edited. The encrypted data is decrypted using an edit permit key, and the data thus decrypted is displayed. Subsequently, the decrypted data is edited.

Fig. 5C illustrates the case in which the encrypted data supplied to the user is stored. The encrypted data is decrypted using a storage permit key, and the data thus decrypted is displayed. Prior to storing the data, the data is encrypted again using the storage permit key. Thus, in this embodiment, the data cannot be stored in the decrypted state.

Fig. 5D illustrates the case in which the encrypted data supplied to the user is copied. The encrypted data is decrypted by a copy permit key, and the

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(cont'd)

data thus decrypted is displayed. Prior to copying of the data, the data is encrypted again using the copy permit key. Thus, in this embodiment, the data cannot be copied in the decrypted state.

Fig. 5E illustrates the case in which the encrypted data supplied to the user is transferred. The encrypted data is decrypted by a transfer permit key, and the data thus decrypted is displayed. Prior to transferring the data, the data is encrypted again using the transfer permit key. Thus, in this embodiment, the data cannot be transferred in the decrypted state.~

On page 11, line 4, delete "displayed just as an error message is".

On page 11, line 15, delete "to be used".

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On page 11, line 18, after "may be altered." insert "To prevent alteration of the copyright control program in the present invention, the copyright control program should be encrypted.~

On page 11, lines 22-24, delete "Further, alteration of the programs must not be possible. Therefore, the copyright control program should be encrypted to prevent such trouble."

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On page 11, line 25, delete "A program to" and insert in place thereof -- In one embodiment of the invention, a translation program to--

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On page 12, line 4, delete "increase of cost is negligible." and insert in place thereof --increase in cost is negligible. Therefore, as shown in Fig. 3B, when transmitting the permit key, the copyright control program may also be transmitted utilizing surplus time.

On page 12, lines 6-10, delete:

"Therefore, when transmitting the permit key as shown in Fig. 3B, utilizing surplus time, the copyright control program can be transmitted.

The copyright control program can be supplied together with the permit key and also together with the data as shown in Fig. 3C."

On page 12, line 12, delete "In this case" and insert in place thereof --In Fig. 3C--.

On page 12, line 17, delete "the control of copyrights is reinforced. Also,".

On page 12, line 20, before "The following are some example" insert
--Description will now be provided on the supply of copyright control messages.--

On page 13, lines 8-9, delete "Next, description will be given on supply of the copyright control message."

On page 14, line 30, delete "In case the data" and insert in place thereof
--When the data--.

On page 15, lines 27-28, delete "that take other means for the purpose"
and insert in place thereof --that use other means for this purpose--.

On page 15, line 31, after "information with" insert --the--.

On page 16, line 1, delete "it is available" and insert in place thereof
D.12 ~the copyright information may be integrated~

On page 16, lines 16-17, delete "is added to each piece of data which is
edited by a cut-and-paste procedure and produced" and insert in place thereof

D.11 ~is appended to each piece of edited data using a cut-and-paste procedure~

On page 17, line 4, delete "mixed into it" and insert in place thereof
~mixed into the picture signal--.

On page 17, line 6, delete "In case" and insert in place thereof --If--.

On page 17, line 7, delete "in this method" and insert in place thereof
--using this method--.

On page 17, line 25, insert --the-- before "control code."

On page 17, line 27, ~~insert~~ --a-- after "the data used in".

On page 17, line 28, ~~insert~~ --,-- after "computer system".

On page 17, line 29, ~~delete~~ "operation," and ~~insert~~ in place thereof
--operation--

On page 18, line 8, ~~delete~~ "Fig. 3F or may" and ~~insert~~ in place thereof
--Fig. 3F, or it may--

On page 18, lines 11-14, ~~delete~~ "Using a private key, which only the person concerned knows, and a public key, which other persons also know, a digital signature is prepared from the private key and from the data on the file size of the document data." and ~~insert~~ in place thereof A digital signature is prepared using a private key, which only the owner knows, and the file size of the document data.
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On page 18, lines 15, ~~delete~~ "private key, and the" and ~~insert~~ in place thereof --private key. The--.

On page 18, line 16, ~~delete~~ "other persons using the" and ~~insert~~ in place thereof --others using a--.

On page 18, line 22, ~~delete~~ ", and the author or user may suffer damages".

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On page 19, lines 1-2, delete "as shown in Fig. 3H, 3I and 3J, and that the other part is supplied together with the data to be utilized" and insert in place thereof ~~✓~~, and the other part is supplied together with the data to be utilized (as shown in Figs. 3H, 3I and 3J) ~~✓~~.

On page 19, page 4, delete "data are then combined, and the functions" and insert in place thereof --data are combined. The functions--.

IN THE CLAIMS

Please cancel claims 23, 25, 28, 35, 41, 44, 47, 50, 53, 56, 59, 61, 64, 71, 77, 80, 83, 86, 89 and 92.

Please add the following new claims.

~~95. A method for controlling copyrights of digital data comprising
the steps of:~~
~~supplying encrypted digital data from a database to a user;
in response to a request by said user, supplying a utilization permit key
including a crypt key for said digital data from a key control center to said
user, said utilization permit key comprising a display permit key, an edit
permit key, a storage permit key, a copy permit key and a transfer permit key;
under management of a copyright control program, performing the
steps of:~~